Dr. med. dent. Michael Leistner

Ceramic ‘snap-on’ attachments for two-piece ceramic implants

- 1978-1981 Training to become a dental technician
- 1989 Examination, licence to practise and doctorate at the Albert Ludwig University of Freiburg, degree in dentistry
- 1989 Scientific work for Krupp Medizintechnik with a focus on titanium welding, department of Prof. Dr. Kappert
- 1991 Established in private practice
- 1994 Lecturer on the subject of all-ceramic restorations
- 2001 Winner of the Russian Stomatology Championship
- 2002 Lecturer on the subject of implantology
- 2003 International lecturer
- 2005 Lecturer on the subject of metal-free posts
- 2007 Founding of a supra-regional dental practice
- 2009 Dental licence in Porto (Portugal)
- 2012 Lecturer on all-ceramic implants

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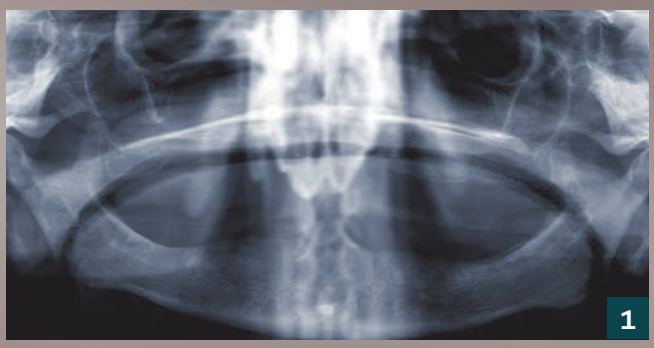
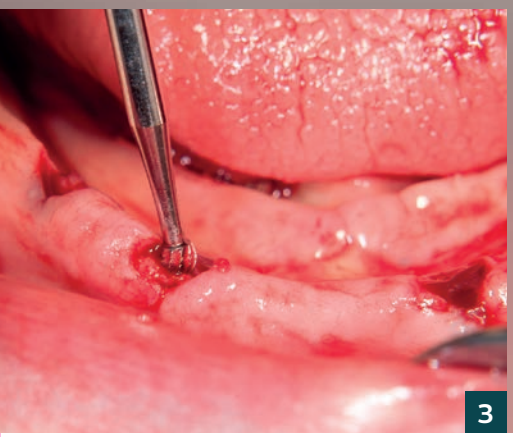
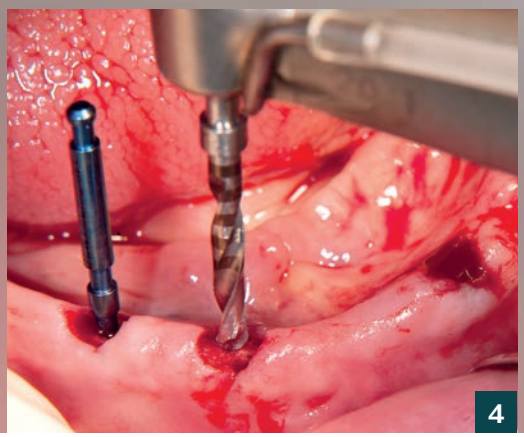






The new Docklocs system from Dentalpoint/ Zeramex (Medealis) has been specially developed for the two-part Zeramex XT implant system. The abutment is already connected to the proven metal-free Vicarbo screw and can therefore be easily screwed into the implant. Zeramex XT implants are two-piece, metal-free, screw-retained ceramic implants available in lengths from eight to fourteen millimetres and in three diameters (3.5 / 4.2 / 5.5).

Zeramex also offers a matrix system for the new 'Snap-on' Docklocs attachments, in which the matrix housings are made of zirconium oxide to enable a metal-free superstructure. The prosthesis is reinforced to minimise the risk of breakage by using a PEEK framework instead of a model casting.

The 93-year-old patient had problems with the stability of her dentures after the last two teeth in her lower jaw had to be removed (Figs. 1, 2). Above all, she wanted more stability when chewing. In addition, the wobbly lower dentures hindered her speech. There were no contraindications for implant placement in the patient's medical history.

After detailed discussion, she opted for four ceramic implants. The denture was to be designed using the new Docklocs attachment system (Medealis, for Zeramex). The case report describes both the surgical procedure for inserting the ceramic implants and the step-by-step fabrication of the final prosthetic restoration for the patient (Figs. 3-34).

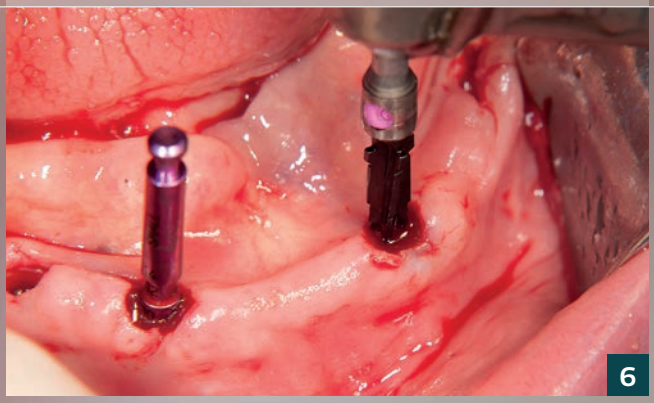
1 Initial diagnostic X-ray (OPG).

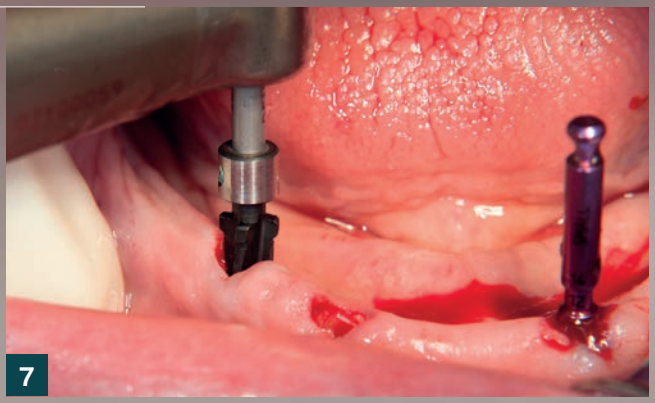
2 Initial situation of the alveolar ridge.

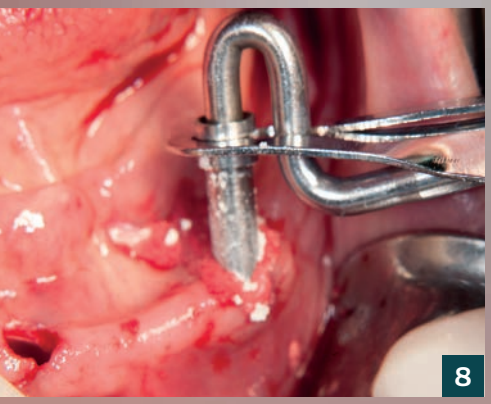
3 Initial situation of the alveolar ridge.

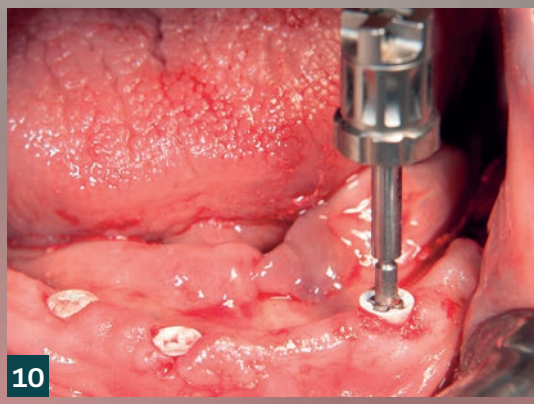
4 After the first pilot drilling, the other drillings are aligned parallel using a depth marker

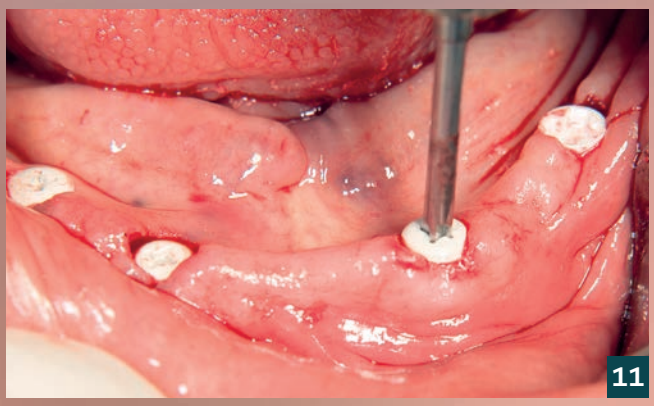
5 Expansion of the alveoli with Zeramex XT Zeradrill implant drills.

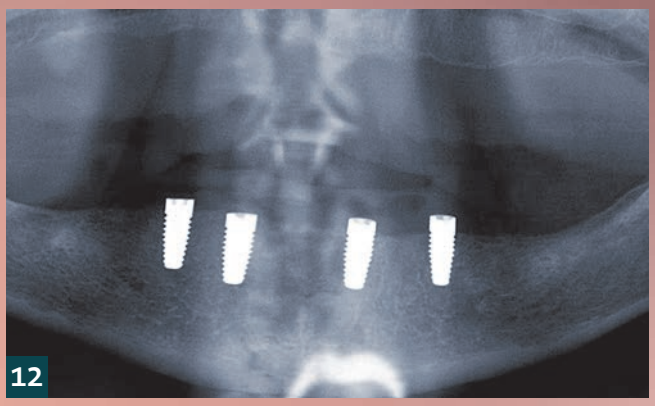


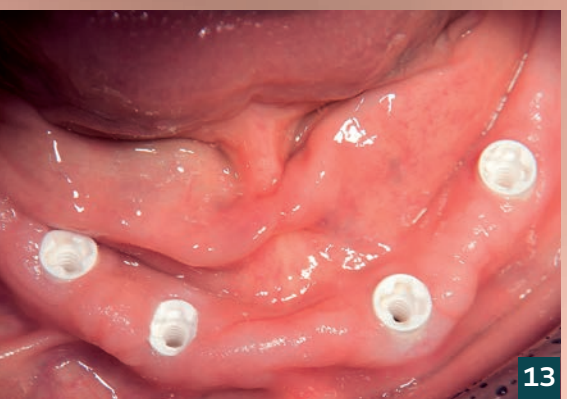


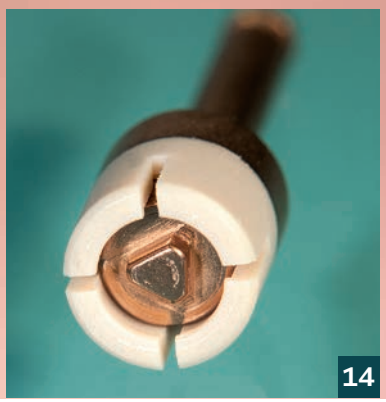












6 Depth marker for parallel alignment of the drilling.

7 Final size of the preparation.

8 Intra-alveolar administration of antibiotics.

9 Sterile removal of the implant from the packaging with the transfer instrument (pick-up).

10 Torque-controlled insertion (max. 35 Ncm).

11 The implants are closed with healing caps.

12 OPG after implantation.

13 Opening of the implants after three months of healing.

14 Insertion instrument for easy insertion of the ...

15 ... Docklocs abutments with max. 15 Ncm.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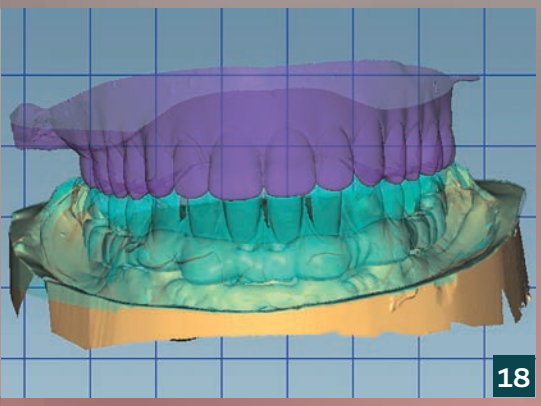
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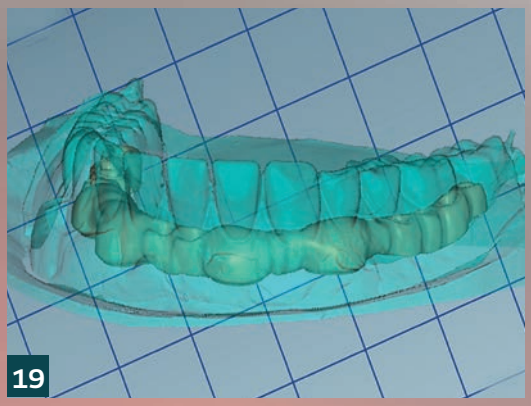
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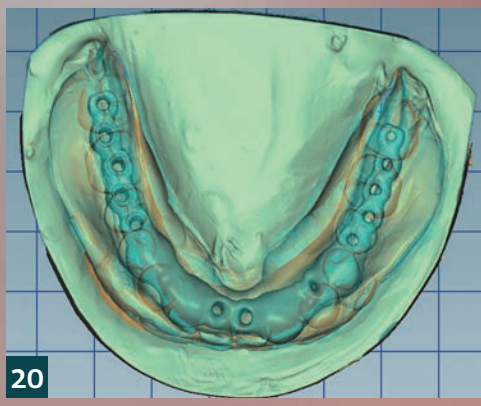
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16 Range of matrix housings and matrices from Dentalpoint/Zeramex in collaboration with Medealis.

17 Zirconium oxide housings with transfer matrices attached.

18 3D representation: lower jaw model with PEEK framework, arrangement of lower jaw teeth.

19 Computer representation of PEEK framework with prosthetic teeth in place.

20 Occlusal representation on the computer, PEEK framework and arrangement.

21 Lower jaw model with Docklocs analogues ...

22 ... and with matrix housings attached

23 Finished prosthesis on the model.

24 Finished lower jaw prosthesis from the side.

25 The recess for the Docklocs housing in the PEEK framework is clearly visible.

26 Quick Up (Voco) plastic used for bonding.


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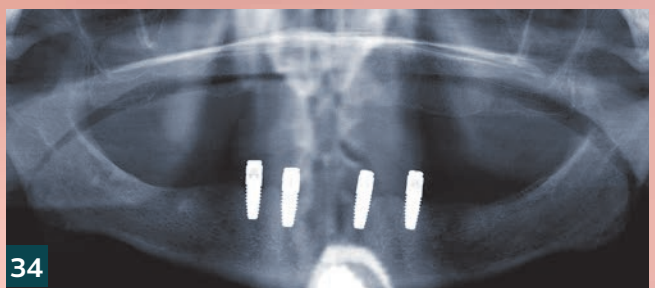
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27 Prosthesis removed after bonding.

28 Insertion of the matrices.

29 Depending on the situation, different removal forces (colour-coded) can be selected.

30 Thanks to the matrix, the new prosthesis is easy to handle.

31 Incorporated prosthesis.

32 Side view.

33 Checking speech formation.

34 Final X-ray check.